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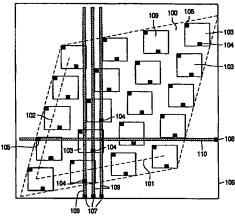
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[Continued on next page]

(54) Title: DEVICE FOR PARALLEL DATA PROCESSING AS WELL AS A CAMERA SYSTEM COMPRISING SUCH A DEVICE



(57) Abstract: The invention relates to a device for parallel data processing, a DSP. The device according to the invention comprises a processor matrix (100) in which processors (103) are arranged in rows (101) and columns (102). Furthermore, the device (100) comprises first and second external data ports (107, 108). The rows (101) arranged in a stepwise manner and the columns are arranged in a stepwise manner. The processors (103) have a first processor data port (104), which is connected with one of the first external data ports (107) by means of first essentially straight connection. The processors (103) further comprise a second processor data port (105), which is connected with one of the second external data ports (108) by means of an essentially straight second connection (110). The first connection (107) and the second connection (108) are oriented substantially orthogonal to each other. A problem associated with conventional DSPs is that the connections to and from the processors within the DSP take up large amounts of silicon area. By arranging both rows and columns of the DSP according to the invention in a stepwise manner the connections may be essentially straight, thus minimizing their lengths and thus the surface area occupied.



EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

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# INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G06F15/80 H04N9/04

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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### EPO-Internal

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X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
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Date of the actual completion of the international search  27 January 2005	Date of mailing of the international search report 03/02/2005
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016	Authorized officer  Michel, T

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